



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**22.08.2001 Bulletin 2001/34**

(43) Date of publication A2:  
**13.06.2001 Bulletin 2001/24**

(21) Application number: **00126184.1**

(22) Date of filing: **30.11.2000**

(51) Int Cl.7: **G11B 27/10**, G11B 27/11,  
H04H 1/00, G11B 19/02,  
G11B 31/00, H04B 7/26,  
B60R 11/02, G11B 7/16  
// G01C21/26

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU**  
**MC NL PT SE TR**  
Designated Extension States:  
**AL LT LV MK RO SI**

- Nagaki, Koichi, c/o Pioneer Corporation  
Tsurugashima-shi, Saitama-ken (JP)
- Adachi, Hajime, c/o Pioneer Corporation  
Tsurugashima-shi, Saitama-ken (JP)
- Takeuchi, Yoshikazu, c/o Pioneer Corporation  
Tsurugashima-shi, Saitama-ken (JP)

(30) Priority: **30.11.1999 JP 34060399**

(71) Applicant: **Pioneer Corporation**  
**Meguro-ku, Tokyo (JP)**

(74) Representative: **Viering, Jentschura & Partner**  
**Postfach 22 14 43**  
**80504 München (DE)**

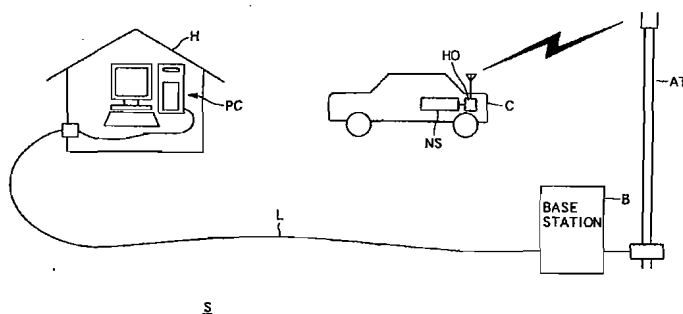
(72) Inventors:  
• **Kaneko, Michihiro, c/o Pioneer Corporation**  
**Tsurugashima-shi, Saitama-ken (JP)**

(54) **Audio information reproducing apparatus, movable body, and audio information reproduction controlling system**

(57) An audio information reproducing apparatus (NS) is provided with: a memory (HD) for storing audio information comprising a plurality of unit information, such as a plurality of music compositions; a transmitting device (HO) for transmitting correspondence information (ML), such as music list information or the like, corresponding to each of the plurality of the unit information to an external portion; an obtaining device (HO) for obtaining reproduction control information (PR) to control

a reproduction manner of each of the plurality of unit information from the external portion, the reproduction control information being generated on the basis of the transmitted correspondence information; and a controlling device (6) for reproducing the plurality of unit information from the memory while controlling the reproduction manner of each of the plurality of unit information in accordance with the obtained reproduction control information.

**FIG. 1**





European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 00 12 6184

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	DE 94 10 829 U (MUELLER MATTHIAS DR ING) 1 September 1994 (1994-09-01)  * the whole document * ---	1-3, 6, 9-11, 14, 15	G11B27/10 G11B27/11 H04H1/00 G11B19/02 G11B31/00 H04B7/26 B60R11/02 G11B7/16 //G01C21/26
A	US 5 751 672 A (YANKOWSKI CARL J) 12 May 1998 (1998-05-12) * the whole document * ---	1-5, 9-13, 15	
A	US 5 228 014 A (D ALAYER DE COSTEMORE D ARC ST) 13 July 1993 (1993-07-13)  * the whole document * ---	1-4, 7-10, 12, 15	
A	US 4 872 151 A (SMITH) 3 October 1989 (1989-10-03) * the whole document * ---	1-6, 9-12, 15	
A	EP 0 777 106 A (ADAM OPEL A.G.) 4 June 1997 (1997-06-04)  * the whole document * ---	1, 2, 4, 5, 7-10, 12, 13	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
A	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 05, 30 April 1998 (1998-04-30) & JP 10 023073 A (SONY CORP), 23 January 1998 (1998-01-23) * abstract * ---	1, 7-9, 13	G11B H04H H04B G11C B60R H04Q G01C G08G
A	US 5 987 525 A (GREENBERG ANN E ET AL) 16 November 1999 (1999-11-16) * the whole document * ---	1-3, 5, 7, 9, 10, 13	
-/--			
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>29 June 2001</b>	Examiner <b>Daalman, F</b>
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone  Y : particularly relevant if combined with another document of the same category  A : technological background  O : non-written disclosure  P : intermediate document</p> <p>T : theory or principle underlying the invention  E : earlier patent document, but published on, or after the filing date  D : document cited in the application  L : document cited for other reasons</p> <p>&amp; : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03/92 (P04/C01)



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 00 12 6184

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 02, 29 February 2000 (2000-02-29) & JP 11 306742 A (SONY CORP), 5 November 1999 (1999-11-05) * abstract *	1,2,4, 7-10,12, 15	
P,A	DE 199 17 169 A (KAMECKE KELLER ORLA) 2 November 2000 (2000-11-02)  * column 9, line 38 - line 47; figure 6 * * column 11, line 59 - column 12, line 31; figure 12 *  -----	1,2,4,5, 7-9, 12-15	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>29 June 2001</b>	Examiner <b>Daalman, F</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	

EPO FORM 1503 03.82 (P04001)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 12 6184

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

29-06-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 9410829 U	01-09-1994	NONE	
US 5751672 A	12-05-1998	AT 192879 T AU 700004 B AU 6344896 A CA 2227519 A CN 1192285 A DE 69608281 D DE 69608281 T EP 0840927 A HK 1007910 A JP 11514482 T WO 9705616 A US 6247022 B US 6147940 A US 6128255 A US 6128625 A	15-05-2000 17-12-1998 26-02-1997 13-02-1997 02-09-1998 15-06-2000 30-11-2000 13-05-1998 30-04-1999 07-12-1999 13-02-1997 12-06-2001 14-11-2000 03-10-2000 03-10-2000
US 5228014 A	13-07-1993	BE 1003591 A	28-04-1992
US 4872151 A	03-10-1989	NONE	
EP 0777106 A	04-06-1997	DE 19545059 A	05-06-1997
JP 10023073 A	23-01-1998	NONE	
US 5987525 A	16-11-1999	AU 7124698 A EP 1010098 A US 6154773 A WO 9847080 A US 6240459 B US 6230207 B US 6230192 B US 6061680 A US 6161132 A	11-11-1998 21-06-2000 28-11-2000 22-10-1998 29-05-2001 08-05-2001 08-05-2001 09-05-2000 12-12-2000
JP 11306742 A	05-11-1999	NONE	
DE 19917169 A	02-11-2000	NONE	